

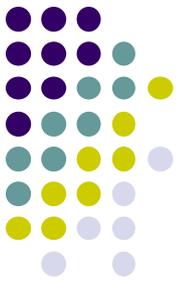
Globally successful SMEs from Korea and Implications for Korea-China Economic Relations

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Korean Growth regimes: imbalanced, or exclusive, growth, not inclusive growth



Leading; strong

Big Business (chaebols)

Government

Export-oriented Bus.

Manufacturing

Outward FDI

Following; weak

SMEs

Civilians

Domestic-oriented

Services

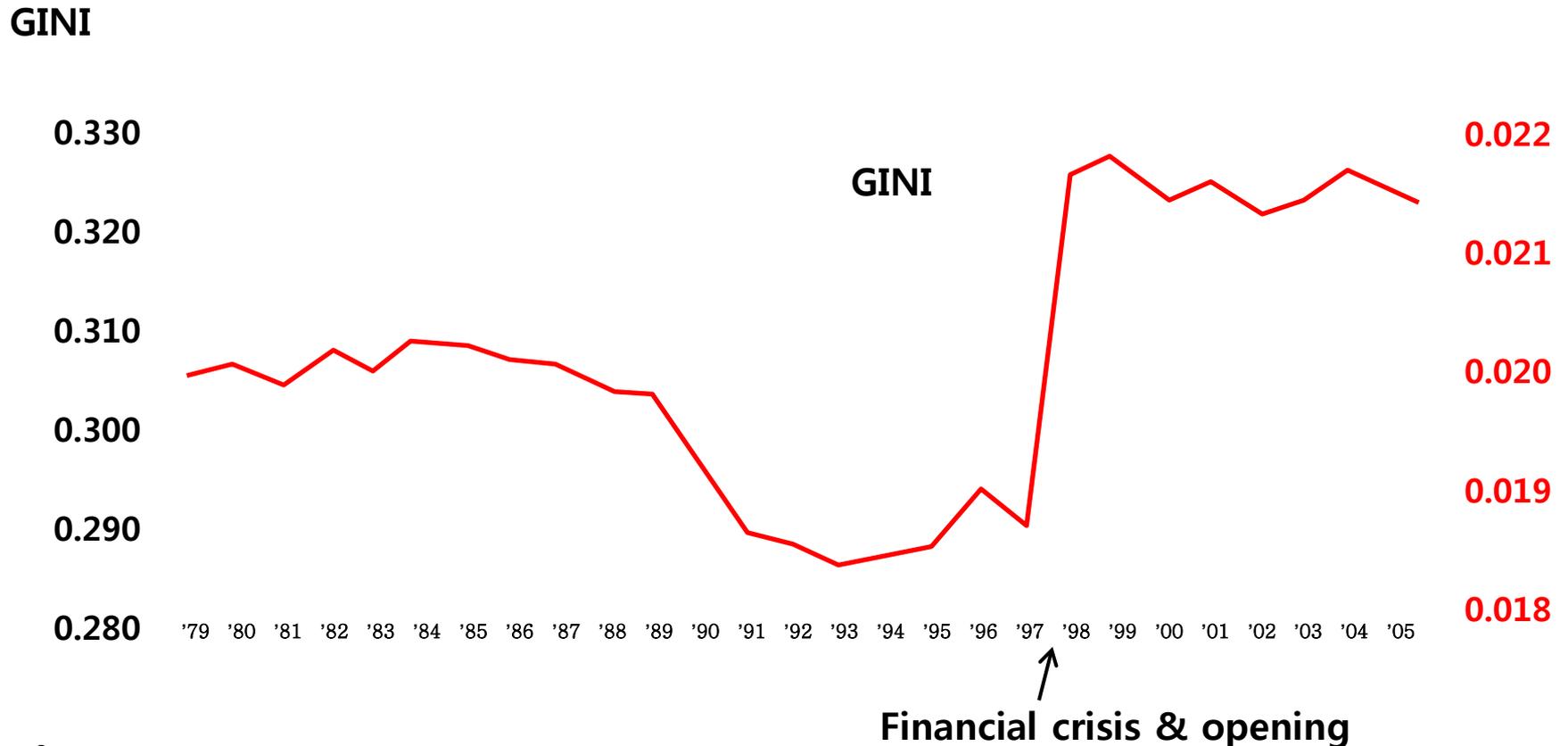
Inward FDI

- > It worked fine (rapid catch-up with more equality)
until the 1997 Asian crisis;
then we had globalization and significant opening
- > increasing polarization and inequality

Gini coefficient of Inequality

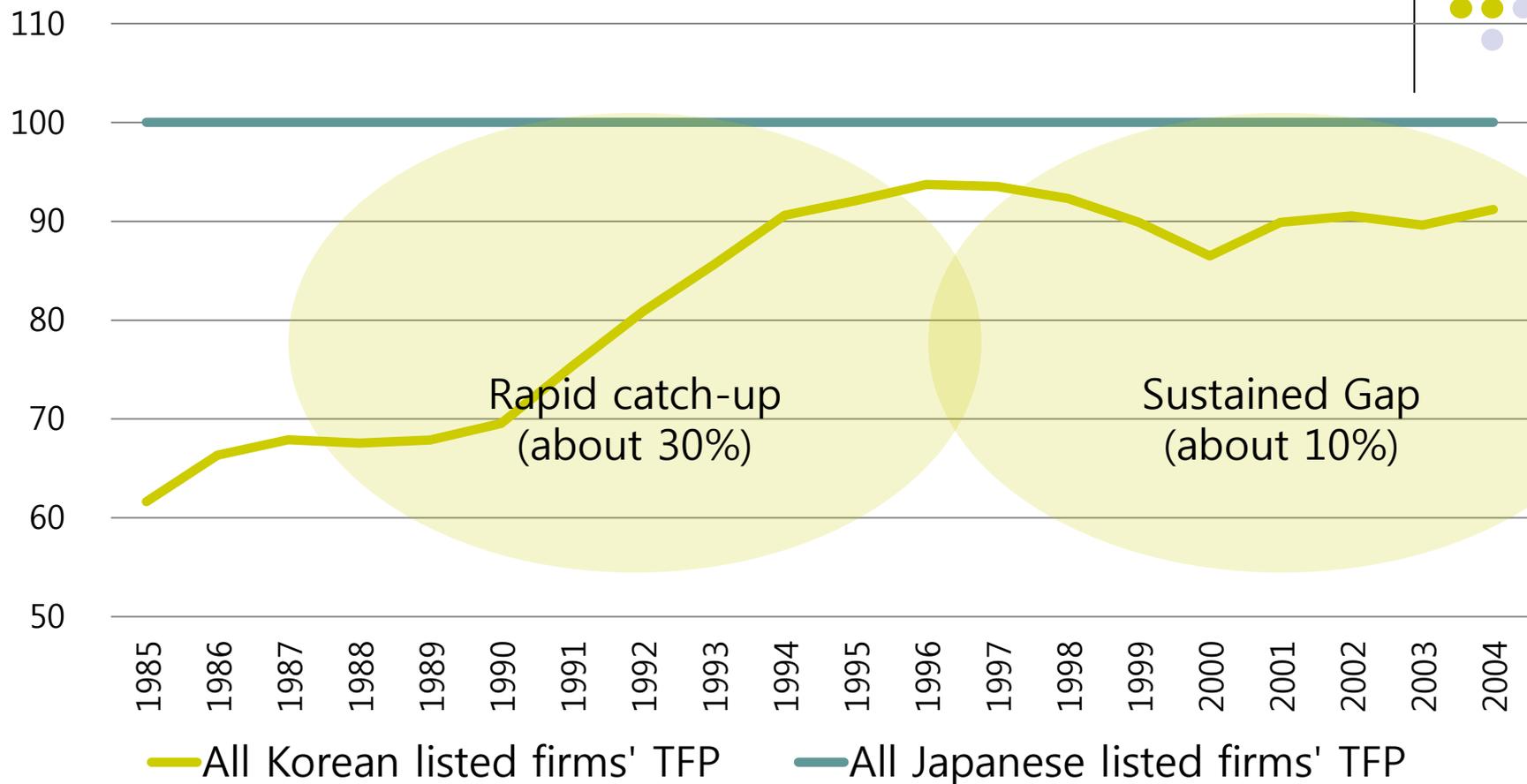
Korea , 1979-2005

More equality during high growth period led by big businesses;
then, after the 1997 financial crisis and with growth slow-down and opening,
inequality increased



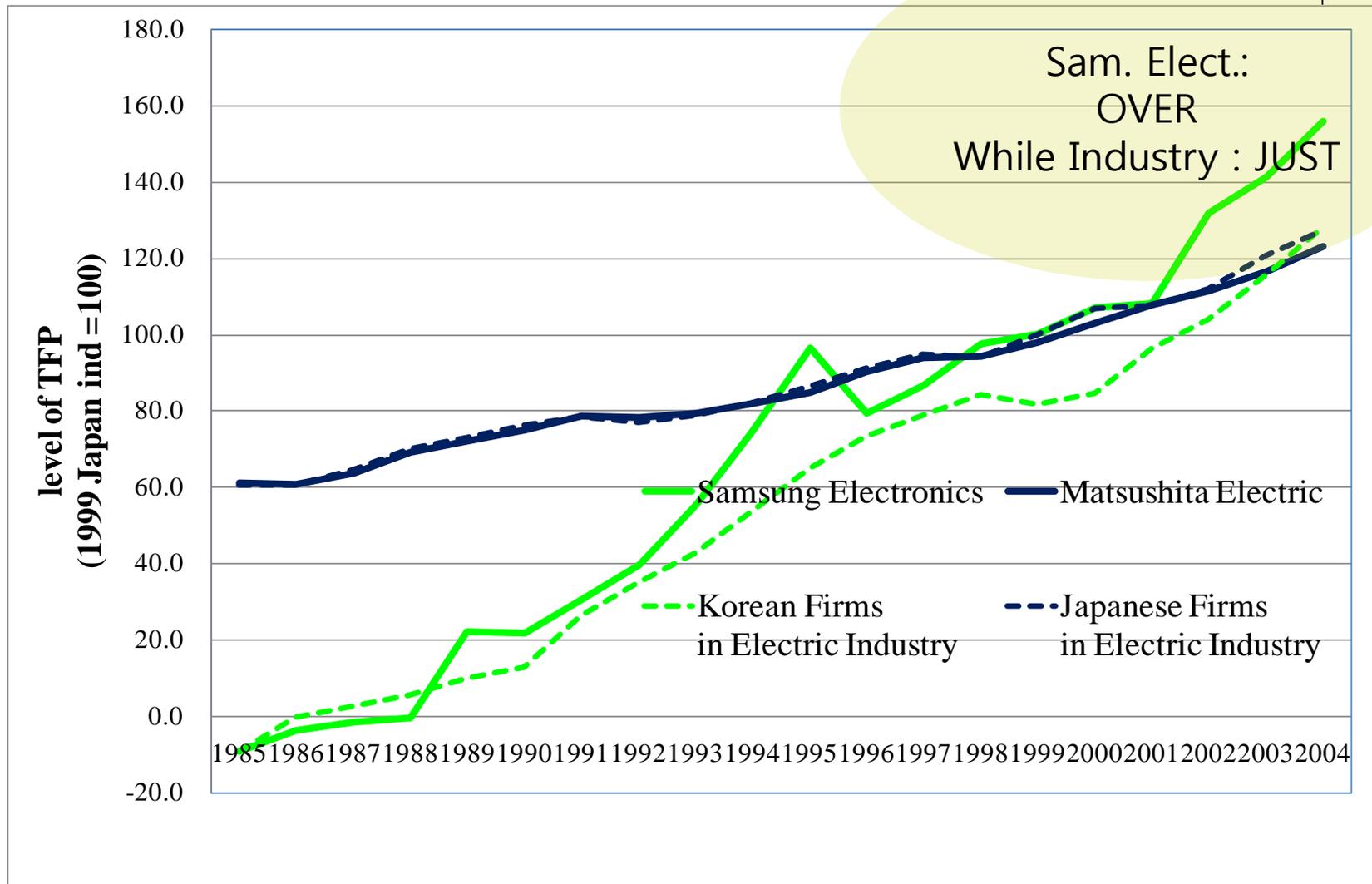
TFPcatch-up of Korean firms with Japanese firms

Jung and Lee (2010: Industrial & corporate change)

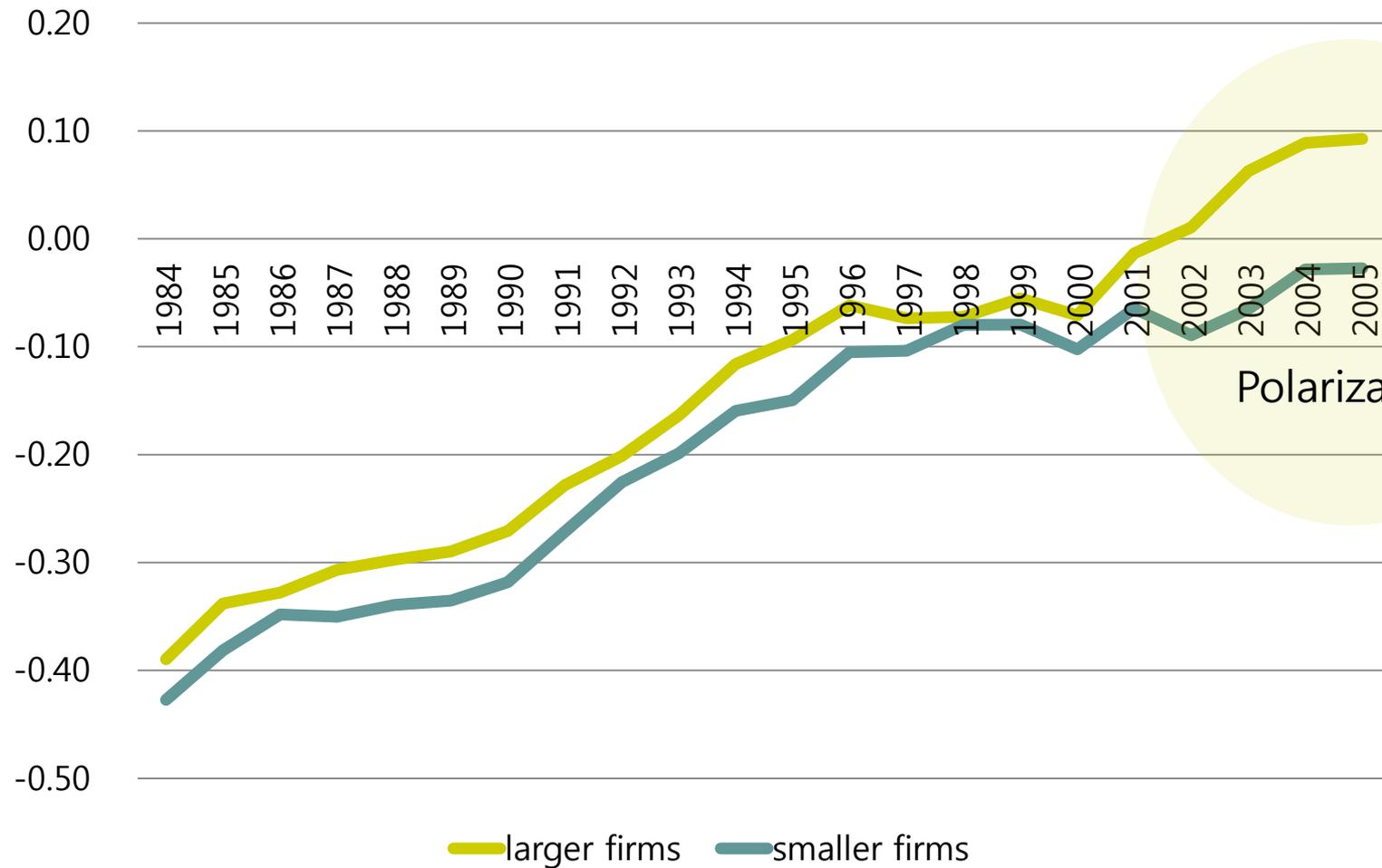


Note : Note TFP level of all Japanese listed firms in each year is set to be 100. ; the difference a=% gap of TFP between two countries.

Convergence in IT: Samsung vs. Matsushita

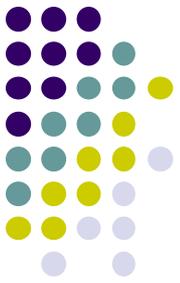


But, increasing Polarization since 2000: TFP level by firm size



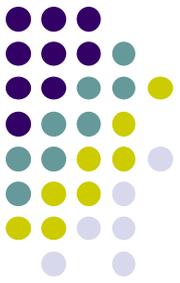
Polarization

Government Responses and Priority



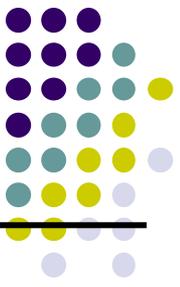
- 1) Overall: "Fair Society" (eg. M. Sendell at Harvard)
- 2) Economic: Shared, inclusive, growth
 - A) Presidential Commission on Shared growth headed by the former PM
 - B) Designated the business items exclusively for the SMEs
 - C) Performance sharing schemes between the Big final assembler and small suppliers:
 - eg) on fair procurement pricing and cash payments on delivery, rather than by 3 month checks
 - cf) on top of many, decade-long, SME support policies, such as R&D subsidies/grants

How to bring up globally successful SMEs



1. Strategic Fundamentals of Catching-up:
= Innovation Capability and Path Creation
2. Strategy to Overcome Challenges in the Course of Catching-up
3. Sustainable Positioning of Post-Catching up
4. Role of Government and Policy Implications

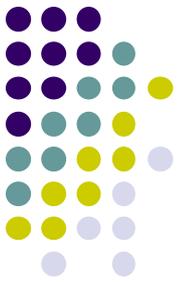
The 10 Catching-up Cases by the SMEs



Industry	Firms (and their target incumbent)
Toy	<i>Aurora World</i> (Ty in USA)
Dishware	<i>Hankook Chinaware</i> (Wedgewood in U.K.), <i>Lock&Lock</i> (Tupperware in U.S.)
Musical Instruments (violin)	<i>Shimro Musical Instruments</i> (Suzuki :Japan)
Home appl: rice cooker	<i>Cuckoo</i> (Zojirushi : Japan)
Motorcycle Accessories	<i>HJC Helmet</i> (Shoei (Japan) or Bieffe (Italy)
Cosmetics	<i>Amore Pacific</i> (L'Oreal) <i>Missha</i> , <i>The Face Shop</i>
Machinery (equipment in semi-conductor; sewing machines)	<i>Jusung Engineering</i> (AKT) <i>and Sunstar</i> (Tajima : Japan)

Tajima: M/s: 60% in 1997 to 27% in 2003; cf) Sunstar: 33%, no 1 in the world

Criteria to be a Success: consumer vs. producer goods: = catching up in market shares against the incumbent



1) In Consumer, final, goods firms:

a OBM firm (Own-brand manufacturing, eg, NIKE)

cf) OEM – ODM -> OBM

Own-equipment -> own design -> own brand;

= from a low-value added maker to higher value-added maker and seller

2) In Producer, intermediate, goods firms:

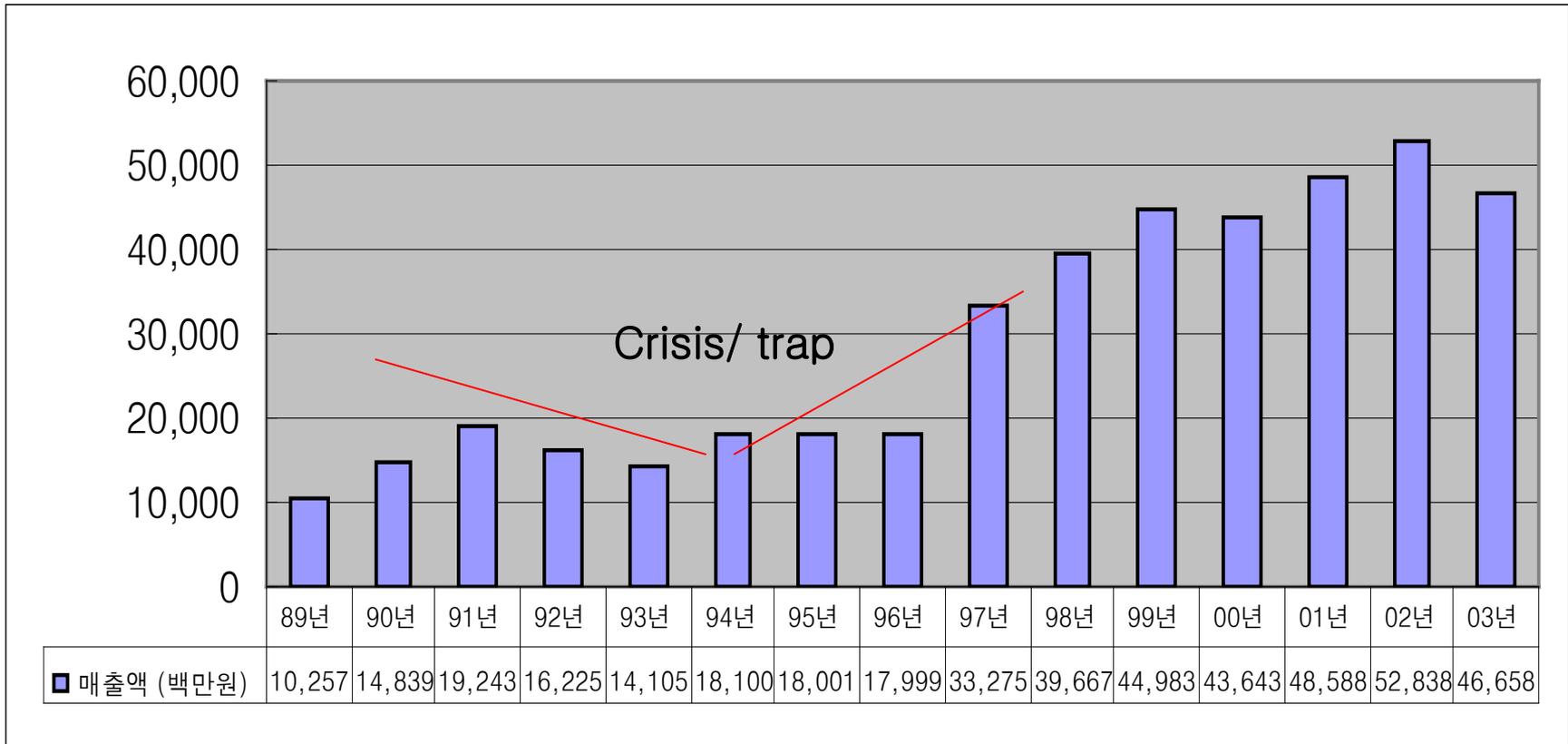
supplier to multiple number of client firms, including overseas

cf) startups -> exclusive, dependent, supplier to a single big business

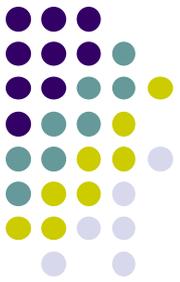
-> independent supplier to multi-clients

Trends of Sales by Aurora World

with 1992 the year of own brand marketing
showing "U" shaped OEM trap over 1991-97
(unit: million Won)



Three Patterns of Catch-up (Lee & Lim 2001: Research Policy)



Path of the Forerunner

stage A --> stage B --> stage C --> stage D

Path-Following Catch-up

stage A --> stage B --> stage C --> stage D

eg. PC, some consumer goods, and Machine Tools

Stage-Skipping Catch-up (leapfrogging I)

stage A --> stage C --> stage D

eg. Hyunda's fuel-injection engine development (cf. carburetor engine)

Samsung' 64 K D-Ram production tech.; 256 K D-ram design technology

Path-Creating Catch-up (leapfrogging II)

stage A --> stage B --> stage C' --> stage D'

eg. CDMA development, digital TV (C and C', alternative technologies)



*What do you need
to stage a successful and
sustainable Catching-up?*

Path Creating in SME (a new combination of existing) = Common Success Factor



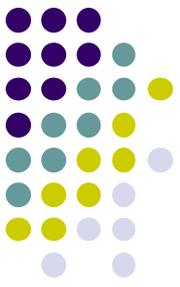
- **The cases show that successful catch-up tend to involve the element of path-creating; creating for their own path different from their forerunners.**

Shimro Violin (custom-made technology + mass production technology)

Cuckoo (electric cooker + gas-pressure cooker = electric & gas cooker)

HJC Helmet (ABS copolymer + PC plastics = new plastics that stroke a critical balance between hardness and shock absorbing resilience)

Amore Pacific (newly internally-developed oriental herbal cosmetics rather than copying the existing products from the west)



To Create a Path, You Need Innovation Capability

- **Necessary Factors for Successful Catch-up: Innovation Capability (developing new products or processes):**

Acquiring innovation capability → learning process

- Relevant "teachers": foreign firms, universities, or public research institutes
- Effective access to foreign technology: subcontracting (OEM), licensing, alliances, or joint R&D
- Continuous in-house trial and error: in-house R&D
- Acquiring capability of developing differentiated products: tacit knowledge based on one's own experiences accumulated over time
- Combining external explicit knowledge and internal tacit knowledge is better



Learning from outside vs. within

1) If target technology is “more” new:

Learning from external sources becomes crucial

Shimro Musical Instruments (German artisans),

Hankook Chinaware (Royal Doulton Group -> bone-China technology;
for silver nano-technology -> establishment of a joint venture with *Miji Tech*.)

2) If target technology is more related to one’s prior knowledge bases:

Application of tacit (internally developed) knowledge to new product development is essential elements for successful catching-up.

Cuckoo: Consumed 4,000 tons of rice in order to find an optimal pressure for rice-cooking

Lock&Lock: Experimented innumerably to find a new plastic glassware cap that satisfies pliability, hardness, and durability.



1. Challenges in the Course of Catching-up

From Subcontracting to Independent Marketing; The First Challenge

▪ **Developing Independent Marketing Skills (when nobody buys yours)**

The next task for firms who can conduct product development on their own capacity is to make good sales performance.

- 1) Knocking at emerging markets earlier than entering advanced economies (*Sunstar*),
- 2) Adopting the sales-on-credit strategy (*Sunstar*).
- 3) If a firm expands to an advanced economy as a stand-alone, hiring several marketing experts from the host country is an essential tip (*Aurora World*).
- 4) Adopting the latest marketing technique that no forerunner explored:
Lock & Lock (home shopping), *Missha* (internet)

2. More challenges: Counter-Attack from the Incumbent



Counter-Attack from the incumbent firms

- 1) Cancelling orders (*Aurora World*)
- 2) IPR litigation: *Aurora World, Jusung Engineering, Sunstar*
- 3) Price-cut or dumping upon the news of developing competing products by the latecomers: *Jusung Engineering, Sunstar*

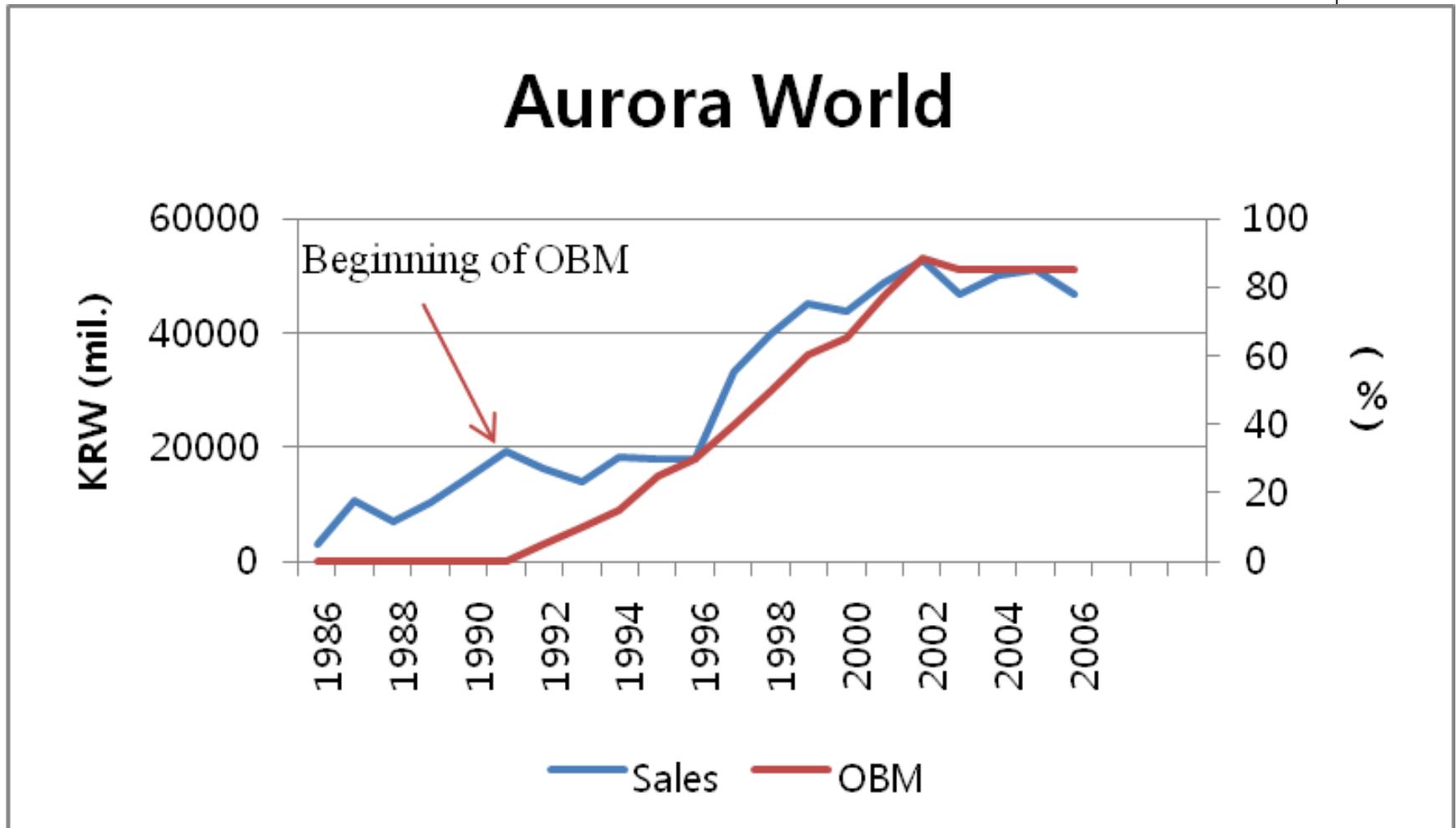
Preparing for these counter-attacks:

Aurora World (got insured for manufacturing goods liability, registered as a new name for the marketing subsidiary in the US)

Cuckoo (did not disclose in public any plan for new product development; conduct R&D during nights)

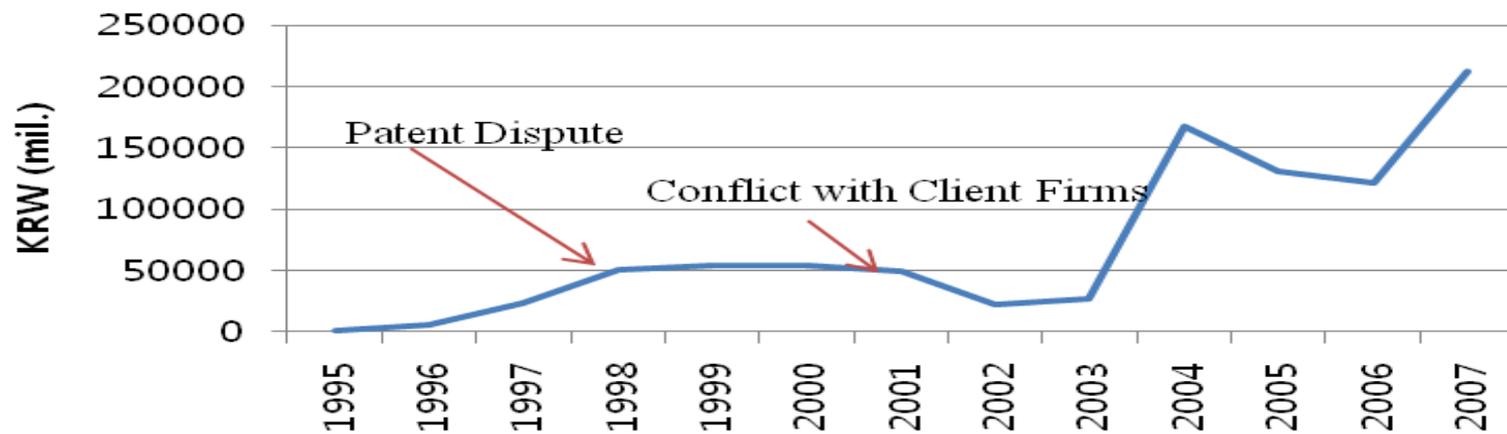
Final winning in law suit: *Jusung, Sunstar*; be prepared for this

Sales & Share of OBM-based Sales in Aurora World

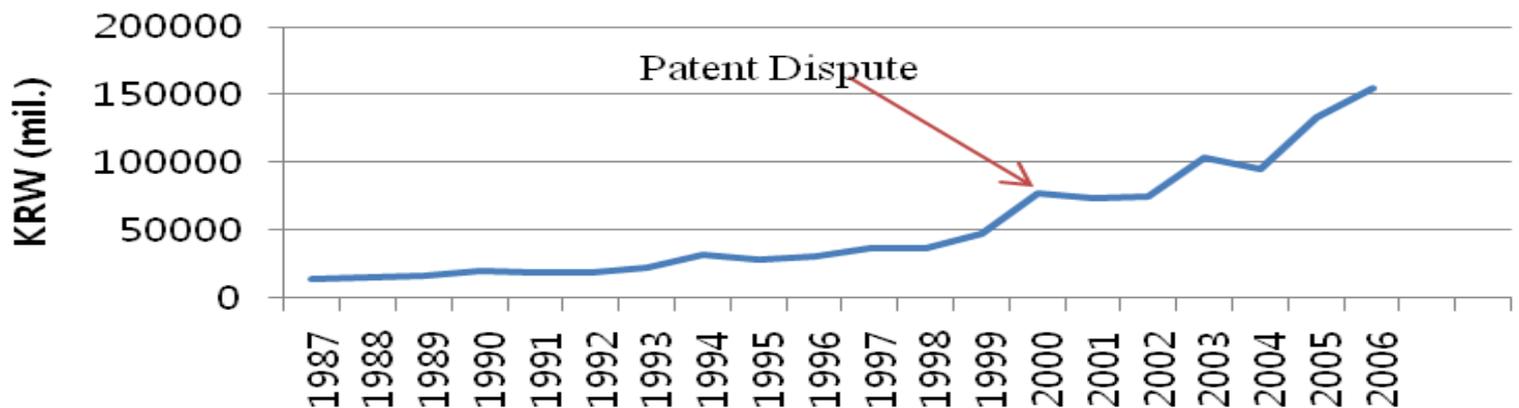




Jusung Engineering

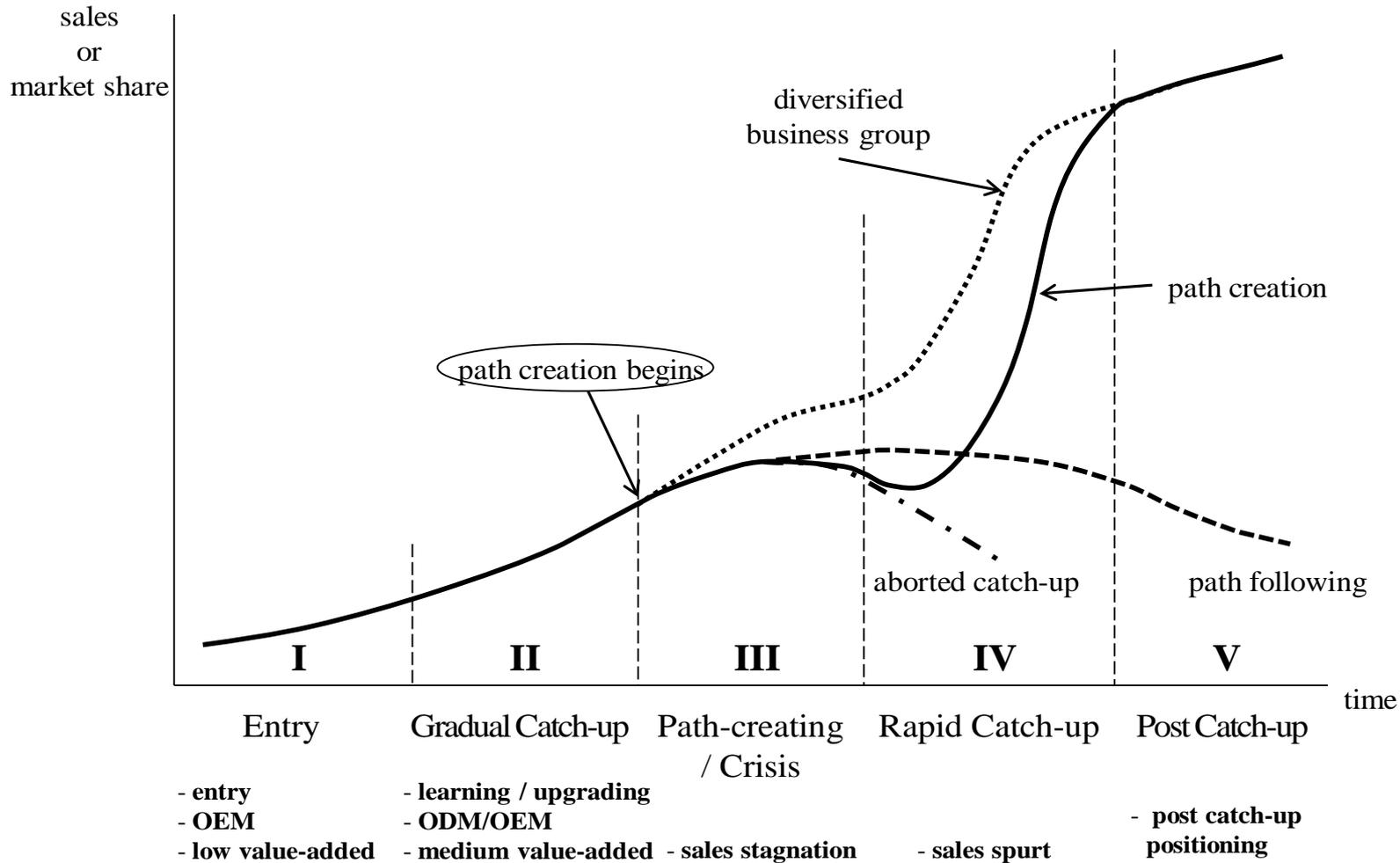


Sunstar

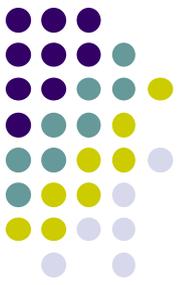




<Stages in Dynamics of Catch-up by SMEs>



Final Stage: Global Production & Marketing System

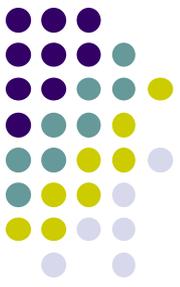


- Conduct R&D in home country and operate overseas subsidiaries for production and distribution, and thus enhance price competitiveness by going global.
 - : *Aurora World*. established factories in both Indonesia and China-> Flexibly re-allocated production volume from China to Indonesia
- Develop and produce high-end products in advanced economies.
 - : *Shimro Musical Instruments* (has a factory in Germany) produces *Saint Antonio* (a low-end violin product) in China and sells in the local market; produces *Karl Heinlich* (a high-end violin brand) in Germany and supplies it to the local market; and produces the original medium-end violin product in Korea.
- Adopt different marketing strategies in emerging markets vis-à-vis in advanced economies.
 - : *Amore Pacific* (Highlighted country-of-origin as a selling point in emerging markets; but concealing Korean nationality in Europe),
Lock & Lock (All products manufactured in China are exported to the United States, but imports from Korea for the China market)

Post-Catching up: Corporate-Images, Brand Power, Standards/Spec



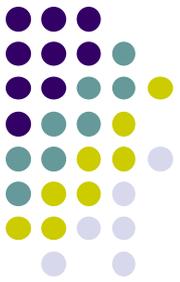
- 1) Branding: Tacit knowledge to be protected either by patent or more often by trade secrets , and eventually be the basis for brand power.
ex) *Aurora World, Lock & Lock, Hankook Chinaware, Shimro Musical Instruments*
- 2) Corporate image constitutes entry barriers
 - *Amore Pacific* (upgraded its oriental herbal cosmetics to the premium market after refinement of its image), *The face shop* (naturalism)
- 3) Safety standards or quality standards as a powerful sources for entry barriers against others
 - *Shimro Musical Instruments* (Violin: specification of Stradivari)
Cuckoo (safety gainst explosion), *HJC Helmet* (helmets: snack standard)



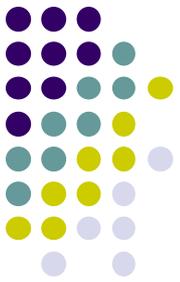
Role of Government and Policy Implications

- Justification for intervention: when incumbent firms systematically stay in the way of latecomer firms with their market power (eg. Predatory Pricing/dumping) , government can tries to support the latecomer firms.
 - However, industrial policies designed to nurture late entrants (or small and medium-sized firms) should consider sectoral differences.
- : The dynamics that small and medium-sized firms become transformed into the category killers (innovators) requires learning-by-doing based on trials and errors. But many failed during this stage of trials and errors (run out of money) or not try it;
- > Gov't should help such firms against the possible losses and failure due to this uncertain effort process
 - > Government: subsidize trial & error –intensive R&D for tacit-knowledge based sectors and SMEs in such industries, rather than randomly funding whatever R&D projects.

Role of Government (2): Help in IPRs Dispute

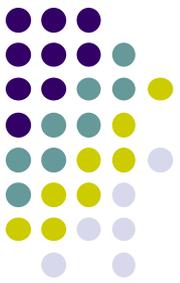


- 1) A direct sharing of costs of legal IPR disputes by the SMEs:
 - eg) Selling commercial insurance against possible IPR lawsuits where the government pays 70% or more of the insurance premium with the maximum amount set for a company.
- 2) Service to conduct pre-marketing/exporting investigation of possibility of legal disputes when the SMEs plan to go for exporting to some countries.
- 3) Ex-post measure included the package consulting for the SMEs who faced the IPR lawsuits with foreign entities;
 - in 2009, 42 SMEs resorted to this service and got the help in the forms of analysis of legal documents and involved patents, exploring solutions such as licensing, patent pools, countervailing patents, counter claims, and going through with the legal processes.
- 4) A public-private consortium fund, the so-called "patent angel," was created to purchase, manage, license, and sell various types of IPRs and help the SMEs;
 - SMEs joined this fund either as a fee-based membership or as a equity holder;
 - a patent umbrella for the SMEs exposed to the possible claims by the patent trolls.



KOREA - CHINA

Economic Relations



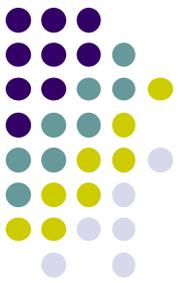
Trade Relationship between Korea and China

1) From Inter-Industry to Intra-Industry Trade

- a) First stage: Inter-industry trade
 - Unstable and fluctuating between surplus and deficits
- b) Second stage: Intra-industry trade
 - Lock in pattern with Korean surplus (China's Deficit)
 - Korea exports intermediate and capital goods
 - China exports final products which are made of the imported intermediate goods

2) From complementary to more Competitive

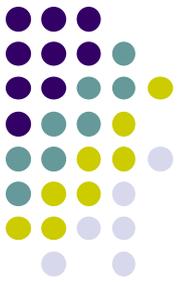
- a) First stage (early 1990s): Complimentary
 - Korea exported manufactured goods to China
 - China exported primary goods to Korea
- b) Second stage (end of 1990s): Competitive
 - Both countries export manufactured goods



Inter- and Intra-industry Trade in Korean Trade (%)

Year	China			Japan		
	inter-industry	vertical intra-industry	horizontal intra-industry	inter-industry	vertical intra-industry	horizontal intra-industry
1991	91.5	5.4	3.1	73.6	19.6	6.7
1995	92.4	5.1	2.5	75.8	19	5.2
2000	72.3	22.4	5.3	64.7	30.1	5.1
2005	73.6	20.6	5.8	66.6	28.2	5.2
2008	61.5	29.7	8.8	70.3	24.1	5.5

From Inter-Industry to Intra-Industry Trade



- **A Survey Reveals that Korean FDI Firms in China Contribute to the Korean Trade Surplus***

(* 1,280 firms surveyed by the Korean International Trade Association in 2003)

- 38.5% of their intermediate goods are imported from Korea (while 44.3% are supplied within China)
- 15.8% of their final products are exported to Korea (while 40.6% are sold within China)

4 Stages of Korean FDI to China



1. (1980s to 1994): Korean SMEs in the labor-intensive industries, relocating assembly lines to China (re-export-oriented)
2. (1994 to 1998): Korean Chaebols in capital-intensive industries, conducting massive investment (targeting the local Chinese & overseas markets)
3. (1998 to 2005): 2nd wave of Korean SMEs, entering China as partners or subcontracting firms to Chaebols (high value-added and capital/technology-intensive)
 - > hollowing-out of Korea's important capital goods industries
4. (2005-): New Wave of FDI in Service Sectors
(eg. Beauty shops, Health & Medical shops, Education, Legal Services)



4 Possible Modes of Doing Business with China

A. Full Model: Koreans Doing All the Value Segments

A-1. SMEs in export-processing or category killer

A-2. Chaebols targeting Chinese markets

B. Partial Model: Korean Doing One or Two Segments

B-1. Korean firms doing two value segments (R&D and Production)

B-2. Korean firms doing on value segment (R&D or Parts)



Modes of the Korean Business in China

A. Full model: Korean Firms Doing All the Value Segments

A-1. SMEs in export-processing or category killer

market/customer group:	third country/world
role of Chinese/local firms:	none
strategy for long term success:	upgrading into OBM or high tier manufacturer
examples:	Aurola World, Lock&Lock

A-2. Chaebols targeting Chinese markets

market/customer group:	Chinese consumers
role of Chinese/local firms:	none
strategy for long term success:	vertical integration, ownership advantage
examples:	Samsung, LG, SK, Hyundai Motors



B. Partial Model: Koreans Doing One or Two Value Segments

B-1. Korean firms doing two value segments (R&D and Production)

market/customer group:	local Chinese firms
role of Chinese/local firms:	vendor and marketing
strategy for long term success:	forming a JV, transforming to a OBM, market diversification, upgrading into source technology provider
examples:	Pantech, Telson, Sewon, and Online game firms -> many failure cases happening

B-2. Korean firms doing on value segment (R&D or Parts)

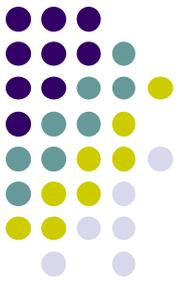
market/customer group:	other (Chinese/Korean) firms in China
role of Chinese/local firms:	vendors in charge of final goods production and marketing
strategy for long term success:	forming a JV, upgrading into source technology, diversification of vendor groups
examples:	Bellwave, Youil, sub-contractors for Hyundai Motors.



Outcomes after 20years

- Among the full vs. Partial modes for the SMEs
 - Only the full model has survived
 - eg: Lock&Lock
- ⇒ Partial models: should use current profits to seek alternatives or new alliances with partners

New Environment for Korea-China FTA



- 1) Global crisis since the 2008:
ever-strong China and weakening US markets.
-> China promoting domestic markets than exports
- 2) Korean firms now seeing China as market,
rather than a factory site as in the past.
-> need FTA to offset no VAT return of capital goods
- 3) Taiwan and Mainland FTA in manufacturing:
Korea and Taiwan in rivalry for China



Why Korea-China FTA?

- 1) Empirical study: Best sequence of FTA for Korea:
 - > Korea-China > Korea-Japan > Korea-China-Japan
 - FTA basically promoting currently strong industries:
- 2) Korea is the few countries that can produce goods Chinese consumers liked most at the moment:
but China will catch up, too:
Time is not on Korea side,
whereas with Japan, Korea is catching up with Japan in key capital goods.
- 3) After Korea-China FTA: Korea to be a gate to China and to attract more investment from Europe and USA; whereas China invest in Korea to go for EU & USA

Win-Win Strategies for Korea+China



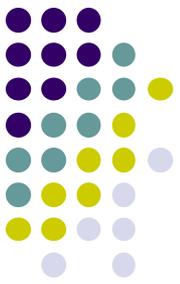
- * To deepen integration :
 - cooperation in common standards in technologies, goods and services to enhance compatibilities and more specialization

- * To establish common coordination and consultation mechanisms
 - common monitoring and signaling system for market (supply and demand) conditions in each sector

- * To promote regional communication and interaction
 - upgrading of multi-language capabilities
 - generating capable man-power bases in Asia

- * To seek new modes of collaboration and alliance with China
 - owing to enhanced capabilities of Chinese companies, Korean Co's to seek more horizontal modes of businesses

Two Upgrading in China and Korea



- Upgrading by China
 - 1) Market Upgrading: Exports->Domestic Markets
 - 2) Product Upgrading: Low -> Higher Ends
- Upgrading in China by Korea
 - 1) Market: Re-Exports -> Domestic China
Korean firms in China-> Chinese & Foreign firms
 - 2) Products: Middle-End -> High-End Parts & Supplies



Thank you!!

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